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ORIGINAL COMMUNICATIONS.

ART. I. *On those Principles of Composition, in Architecture, which are common to all the Fine Arts.* By the CONDUCTOR. Sect. 2. *Forms, Lines, Lights, Shades, and Colours, considered with reference to the Principle of the Recognition of Art.*

WE have shown (p. 220.) in what way the Recognition of Art becomes a fundamental principle in the fine arts. We hear much of the imitation of nature, as a guide in art; but it must never be imagined that, by the phrase "imitation of nature" is to be understood the making of a fac-simile of nature; that is, such a copy as might be mistaken for the original. There could be no art, or creative power, displayed in this; and, consequently, such an imitation could afford no more pleasure to the copier than that which he could derive from the hope of deceiving the spectator; while the spectator, even supposing him to be completely deceived, would experience no satisfaction different from that afforded by the original. Suppose that a person undertook to construct an artificial tree to fix in a hedge-row, or on a lawn, and that it was so exactly like the natural trees near it, that no person could distinguish it from them; what credit would we give to the mechanist who put the work together? Clever he might certainly be; because he had produced such a perfect fac-simile as to deceive us: but we could never allow that he had a talent equal in rank to that of the man who could draw a tree on paper, or paint one on canvass. Every one feels, in a moment, that the power of doing the latter requires a superior degree of mind; and that, while the tree, in the one case, is a mere mechanical production, in the other it assumes the rank and dignity of an emanation from the mind of man; in short, of a work of art. This, we think, is quite sufficient to show, that it is no part of the business of an artist to deceive; that every work of art, to sustain that character, must be avowed as such; and that the essential distinctive principle of works of art is, that they are evidently the creation of man.

All the great principles or instincts which belong to human nature display themselves more or less in the savage state of nations, and in the infancy of individuals. Now, after the

savage has acquired a small stock of food and clothing, in what way does he decorate his dwelling, or ornament his person? Does he cover the former with turf or creeping plants, or grow shrubs over it, in such a manner as to make it pass for a grassy hillock, or a thicket of bushes; and does he wrap the skins in which he is clothed round him in such a way as to imitate nature in the deceptive sense, and make himself pass for a wild beast? No: he builds and dresses in such a way, rude though it may be, as to mark both his dwelling and his clothes as his own work; and, indeed, strives to make them as different from the simple works of nature as his means will possibly allow. What are the first indications given by infants of their taking an interest in the objects around them? A desire to touch them; next to possess them; and, lastly, to show their skill in imitating them. We repeat, that it is this skill, or creative power, which constitutes the essential principle of art.

We allow, at the same time, that there is a kind of art, or rather of manufacture which passes with many for art, which gives some persons a certain degree of satisfaction. To this kind of art may be referred those fac-similes of ruins, fruit, flowers, and even animals, which may be, and often are, mistaken for originals. But this is mere mechanical repetition, and not creative imitation; which, to belong to art, must always be avowed to be such, by the imitation being evidently of a different material from the original.

The principle of the Recognition of Art, then, we shall consider as firmly established; and equally so, that which flows from it, viz., that every work of art must bear external evidence that it is the work of man, and not the work of God. A very few words will show the application of this principle to forms, lines, lights, shades, and colours.

In those arts which imitate the forms of nature, such as painting and sculpture: in the first, art is recognised in the materials, and in the manner in which objects are imitated by colours on a flat surface; and, in the latter, in consequence of the employment of stone or plastic materials, to imitate forms without colour. But the principle of the recognition of art is still farther displayed, both in painting and sculpture, by the artist imitating the forms of the species, rather than that of the individual before him. Even in taking portraits of a particular landscape, tree, man, or animal, this is or ought to be done; and always is done when the work produced assumes the character of a work of art, and is not intended to be a mere graphic memorandum of a particular scene or object, with all its individual peculiarities. It seems almost needless to add, that what will apply to form, applies equally to lines; by which, indeed, form must be indicated. When the central form, or the form of the species, is

imitated, the central lines, or lines expressive of the species, must necessarily be included in the imitation. The one, in short, cannot exist without the other. The same observations will apply to lights, shades, and colours, with reference to the imitation of natural objects: but we have, we trust, said enough to show that the principle of the recognition of art applies even to those arts which imitate the forms of nature, and in which, at first sight, it might be thought impossible so far to deviate from the form of the object imitated as to render the recognition of art obvious in that particular.

In architecture, and in the sculpture of artificial forms, such as vases, &c., art is at once recognised in all forms which are bounded by straight lines, and included in perfectly flat surfaces; or by circular or regularly curved lines, and perfectly globular or curvilineal surfaces. There is no such thing in external nature as an absolutely straight line, or one curved with perfect regularity; and hence there is no such thing as a perfect square, a perfect parallelogram, or a perfect circle or oval, in general scenery. Nature affords many approaches to these and other regular and symmetrical forms, but she leaves it to man to perfect and complete them. All forms, therefore, which may be defined as geometrical, that is, all which are perfectly regular or symmetrical; in short, all which are formed by the repetition, more or less frequent, of the same parts or lines, must be at once recognised as belonging to art.

The art of architecture is, more than all others which are classed with the fine arts, an art of artificial forms; and the reason for this is to be found in the principles of architectural construction, with which, as they are not common to all the fine arts, we have, at present, nothing to do. Whatever may be said of the ornaments of architecture, no one will assert that the great masses of a building, or even its doors, windows, roof, and chimney tops, are imitations of nature. Neither will any one assert that these masses, doors, windows, roofs, and chimney tops may not be combined in such a manner as either to be beautiful and satisfactory, or otherwise. We need hardly remind our readers that it is the object of the chapter, of which the present article is a section, to show in what manner the forms of architecture, and the lines, lights, shades, and colours produced by these forms, may be combined so as to produce architectural beauty.

In the general forms or masses of architecture, it will be found that, the more the forms of nature are deviated from, the higher will be the style of the building. A cottage with the walls of mud, or of turf, or of round land stones or boulders, is low in the scale of art, compared with one the walls of which are of brick, or of squared stone; and a house where the stones

are not only squared, but smoothly hewn, and rubbed to perfectly flat surfaces, ranks still higher in the scale. If an architect were to imitate the perpendicular face of a rock in the walls of a house, and if he were to make his doors and windows in the form of cracks, chasms, or other holes of a natural or accidental character, he would cease to be an artist.

If it is easy to comprehend how art is to be recognised by forms and lines, it is not less so to display a character of art in lights, shades, and colours. There is hardly such a thing in nature as an even distribution of light over a flat surface; for this reason, that there are few or no truly flat surfaces in nature. The exception is the surface of a still lake; but even that is varied by the reflection of the surrounding scenery, or of the clouds of the sky. The same may be said as to shades and colours: there is no continuous flat shade, or flat tint, in nature; because, as before mentioned, there are no continuous surfaces. Hence, whenever artificial forms are introduced, there, not only lines, but lights, shades, and colours, should be evidently artificial also. Hence, in colouring rooms, the groundwork on which the ornaments are placed should be always one even tint of colour; and the ornaments bordering or distributed over such a tint should never resemble fac-simile copies of nature, but always display the average or specific form of whatever object they may be intended to represent, and be disposed in such a manner as to be recognised as artificial. Flowers, for example, should not be painted as if they had been thrown against a wall or a ceiling at random; but they should be disposed in regular borders, wreaths, or groups. It must be recollected, at the same time, that to this, as to all other principles and rules, there are exceptions. For example, if it is desired to surprise, puzzle, or confound, then a disorderly distribution of the parts of a composition, or its ornaments, will attain that end, which would be altogether defeated by an orderly distribution of them.

In the details of architecture, and more especially in its sculptured ornaments, natural forms, such as foliage and flowers, are commonly imitated. Here art is recognised not only by the material employed, but by the more regular symmetrical, or otherwise artificial, character of the imitation, and by its approaching the average form of the species, rather than that of the individual. Hence close imitations of nature, even though in stone, are never so pleasing as those which, though scientifically correct with reference to nature, have, at the same time, a decidedly artificial character. There are many ornaments belonging to the early period of Gothic architecture liable to the objection of being too close imitations of nature; and those rustic columns, applied to cottages, which not only have their bark left on, but even retain parts of their branches, are par-

ticularly obnoxious to, and altogether inconsistent with, a character of art. If we examine the objectionable ornaments alluded to, we shall find that the principal cause of our displeasure is the want of a character of art in the imitation. The general form of the flower, of the leaves, and of the stalk connecting them, will be found to be such as might have been produced by a cast from the originals; in other words, we shall find the piece of sculpture a fac-simile of an individual flower, instead of an imitation, according to art, of that flower as a species.

ART. II. *On Uniformity in Architecture.* By W. H.

THE developement of the organ of order in the human system, by the application of it, in every description of physical arrangement, is at once the most conclusive proof of its existence, and of its imperative nature. As an acquired rule of life, it is an habitual possession, but it is more primitively of an instinctive origin; because those who are most distant from its acquirement are equally ready to own its supreme value, and to envy it in others. In commercial affairs, the want of it is a disgrace; in domestic life, it is the matron's ambition; in dress, it is perfection. It is admirable in business, for its convenience; at home, for its comfort; and personally, for its example. The influence it has upon architecture produces, as one of its results, uniformity.

In defining the expression uniformity, it is considered as alluding to the correspondence or similarity of the parts of an object, or of objects collectively, with each other, in the formation of a whole. Architecture, which is often mentioned in the same breath with painting and sculpture, must on this topic be separated. The copyist of nature, in the various forms of creation, finds nothing either so far similar in itself, or with other objects, to justify the term uniformity in its representation. Were the human figure to be delineated in a geometrical manner, with each limb corresponding in altitude to its opposite, it certainly might then be uniform, but it would not properly depict life; and, in fact, any attempt to extract such a principle of exactitude from the appearances of natural productions must fail, when their infinite multiplicity of variations seems quite to banish such a thought. Although architecture, in this particular, cannot claim to be an imitative art; it is the more so one of invention, in suiting itself, by constructive uniformity, to the reasonable habits and tastes of mankind. How far this view is effected, and of what real consequence it is, are intended to be the subject of the following remarks.

In erections of more than ordinary altitude, as, for instance,

towers, steeples, domes, and the like, where they are seen from many points of view, and at considerable distances, rising above inferior objects, they usually present the same appearance in each prospect. In the case of such a building being on a circular plan, a more complete uniformity can be achieved than in any other form; and hence such a form becomes the most simple and compulsory occasion for its adoption. When the purposes of a structure will admit of, and be best answered by, uniformity in its interior arrangement, it follows, as a matter of course, that the same may be kept up throughout its exterior; provided it is insularly situated; and no architect would neglect such an opportunity, by not adopting so desirable a method. This kind of uniformity may be generally attained in designing sepulchres, baths, fountains, and minor architectural erections; but its most frequent and important application is in churches, and other buildings, either for congregational or limited assemblies. In many of such instances it happens, as in St. Paul's Cathedral, that the whole building, both plan and elevation, may be bisected by an imaginary line, with the nicest impartiality; leaving to each half the exact reflection of itself in the other: though each, being so separated, is no longer uniform, but derives its merit in this respect from being exactly similar to the other; thus producing, as it were, a united effect, by a twofold accordance. This manner of disposal in architecture, while it leaves every room for uniformity of details and general similitude of character, works its ultimate advantage, by restricting its great likenesses to the smallest possible number of portions; and which, to judge by the above example, powerfully conduces to grandeur. There is a singular specimen of uniformity, somewhat of this class, in the Banqueting-house at Whitehall, where the front and its reverse are precisely similar, though, of course, completely hidden from each other.

The next species of uniformity is, where utility requires a varied internal plan, and defies any connection with regularity. Having now touched upon it in situations where it must be the architect's pleasure, we arrive at the other side of the question, and pursue him in his perplexity. If a plan cannot be uniform, an elevation is, notwithstanding, to be so; but then it is not only one elevation, but often four. In this regard, circumstances seldom desire more than the style to be maintained in each, although each is expected to be distinctly uniform in itself. An evidence of this appears in the New Post-Office, having four elevations, each complete, and all greatly differing, except in general character. These peremptory demands in the adaptation of outside forms in buildings have led to many of the most ingenious contrivances and schemes; but, at the same time, have, doubtless, often been the means of contracting and perverting many of the

noblest designs. Uniformity is often thus purchased at the expense of convenience, and by the use of deceptions, in the shape of blank representations of entrances and windows with their appurtenances, in places where they never could really appear; and this kind of subterfuge extends itself to many other items. Invention is racked in the struggle for uniformity under difficulties, in proportion to the importance in which it is held. In this attempt, unless the end is perfectly and manifestly attained, it is an abortive effort, and the struggle stands confessed; but, being so attained, the evidence of the difficulty vanishes. The near approach to it fails by its only blemish, and its total absence would be preferable. As an example, the four turrets of the Tower of London are something similar, though no two of them accord in dimensions, or in details; the effect of which is almost ludicrous. To turn from so feeble a specimen of architecture, to one of the most gigantic in talent of modern times (it is alluded to with the utmost respect); the Bank of England discovers a case in point, which is lamentable, from the very excess of its own merits in other respects; and, evincing, as it does, every proof of originality and excellence, it makes the regret the greater that such a composition should suffer, even in a slight degree, from the irregular form of the plot having caused a partial want of uniformity in that erection.

There has been a question mooted respecting the fronts of street houses, as to the comparative advantages of their being collectively uniform, as in Regent Street; or separately so, as in other streets; and this class of buildings now presents itself, in reference to our subject. There requires no greater argument of the collective method being favourable to the appearance of a town, than that most of the great alterations in London (which have been designed by the most eminent architects) have been made with this view; but it becomes a doubt whether it is reasonably conducive to a mercantile effect, that our streets of business should resemble a succession of mansions; or whether the individual purposes and wishes of the occupants are answered or defeated by it. Ask, on this point, a few of the tradesmen of Regent Street their opinion of the new houses in the West Strand (also built collectively), and we presume that they will admire them: but, in their own cases, not one of them is content: the linendraper's elevation is not gay enough; the tavern is too modest; the bookseller's is not sufficiently classical; and so on. Each is dissatisfied, because he is not distinguished from his neighbours; and he endeavours to distinguish himself by every means in his power, by his mode of showing his goods, and also by colouring the plastering of his house differently from others: and certainly, in Regent Street, where there are almost as many stone colours as houses, this completely succeeds in breaking the illu-

sion intended by the design. In private streets, where the same objection to uniformity is not so likely to exist, the idea can be better carried into effect; and therefore it is only in such situations that, in the opinion of the writer, the collective plan can be satisfactorily applied.

It appears that the ultimate end of uniformity in architecture consists in its chief attribute, which is, the assumption of importance; and that the gradations of its consequence keep pace with the respective purposes of buildings. The reverence and awe excited by a church or a palace are not looked for in a cottage. A rigid uniformity, indeed, is almost inconsistent with an unpretending pastoral erection; which, though not so imposing, is often much more touching to equally laudable sympathies. The humble pretensions of a common building may be accredited as fit and unassuming, so long as they are evidently the result of convenience, or even accident; but, when uniformity places them in array as something to enforce attention without being worthy of admiration, it defeats itself, and humility is rendered meanness. In conclusion, while, as a matter of taste, uniformity is only arbitrary, so far as it is desirable in conformity thereto; yet, when desirable, as a matter of practice, it is perhaps the most absolute principle for adherence that occurs in architectural design.

London, July, 1834.

ART. III. *A few Observations on the Anglo-Norman Style of Architecture, and its Applicability to Modern Ecclesiastical Edifices.* By J. A. PICTON, Esq., Architect.

THE ecclesiastical architecture of England, from the time of the Conquest to the Reformation, yields to that of no other country in variety, elegance, and originality. The gorgeous magnificence of our cathedrals, the simple beauty of the village church, with its "tapering spire that points to heaven," the gloomy grandeur of the timeworn remains of our monastic edifices, open up, to all lovers of the grand, the beautiful, and the picturesque, never-failing sources of gratification and delight. The pointed style of architecture, after remaining in abeyance upwards of two centuries, has, within the last fifty years, again attracted a considerable degree of the public attention; and the adaptation of this style to sacred edifices, as well as the beauties of its distinguishing features, are now very generally acknowledged and appreciated. Since its revival in modern times, it has obtained a copiousness of illustration which leaves little to be desired; and, from the increasing partiality of the public generally, it bids fair to remain lord of the ascendant, in eccle-

siastical structures at least, for some time to come. It cannot but appear singular, with all this feeling in favour of Old English architecture, at a period, too, when a search for novelty is one of the distinguishing characteristics of the modern school of the art, that the Norman style, confessedly the parent of all the subsequent varieties of the pointed style, and the source from which many of its beauties have been derived, should have met with so little attention. One reason for this indifference may be, that it is generally considered as simply a debasement of the late Roman style of art; a spurious descendant from the Italian school; too servile a copy to assert any pretensions to originality; and far too rude in its details to be ranked along with its prototype. I am quite willing to admit that, to a certain extent, this opinion has some degree of plausibility; but it will not, I think, be difficult to prove that this style maintains a character sufficiently marked to render it worthy of some consideration; and, though not possessed of all the majesty of the Roman remains, or of the lightness and grace of many specimens of the pointed style which succeeded it, that it still has sufficient merit to render it worthy of being rescued from the neglect in which it has hitherto remained. It is true, there has been no lack of writing on the subject; for, perhaps, those *cruces antiquariorum*, Saxon architecture and the origin of the pointed arch, have elicited more learned discussion and elaborate argument than any other subjects connected with architectural antiquities. What I complain of is, that no practical use has been made of the patient research and laborious investigation thus called into action, and that, notwithstanding all that has been written, so very few buildings should have been erected in this style: and yet, perhaps, there is no style of architecture with which, under certain circumstances, so picturesque an effect may be produced at so comparatively small an expense. To call the public attention to the peculiar features and capabilities of this style is the object of the present article.

The general characteristics of Norman architecture are massiveness and strength, with a considerable degree of rudeness and weight in the minor parts of the earlier specimens; but growing gradually lighter in its proportions, until it finally merged into the early pointed style. Its elements of composition are few and simple: the column and arch constitute its principal features. These, however, are capable of a vast variety of combinations; and, indeed, I should be disposed to consider its merit to consist chiefly in simplicity of outline, combined with picturesque effect in the detail. It requires no intricate tracery, no crocketed pinnacles or canopied niches; and no rich paneling or heraldic devices: and these circumstances peculiarly adapt it to the purposes of the village church, or parochial

chapel. Every person who has a correct taste for propriety in architectural embellishment, must have remarked with pain the bald nakedness of many of our modern (so called) Gothic churches, where ambition of design seems to have waged ineffectual war with poverty of means. Frequently, everything is sacrificed to the appearance of the exterior; and, but for the shape of the windows, it would be difficult to discover what style or order the interior is intended to display: and, where interior decoration is attempted, straight coved ceilings without groins, piers supporting arches cut into a flat wall, and other such abominations, are but poor substitutes for the carved oak or stone groins of our ancestors.

A principal, I might almost say, an essential, feature of our old churches is their division into three aisles, with the centre rising above the side aisles, forming what is called a clere-story; and this arrangement is not at all adapted to modern convenience, which generally requires galleries for a congregation of moderate number. If the roofs of the side aisles are elevated, to admit of height for galleries, the centre part must be raised so high as greatly to increase the expense, besides injuring the hearing; or the clere-story must be omitted, and the centre kept down to the level of the sides, which greatly injures the effect both of the exterior and interior, however correct the details may be. Many of the smaller Anglo-Norman churches have no side aisles; so that no feeling of correctness is invaded by building modern churches on the same principle, which, for the reason just stated, would effect a considerable saving of expense.

In this I would not wish to be misunderstood. I am no advocate for slavish imitation, and consider it much better to endeavour to imbibe the spirit of our old architects, than servilely to copy their works; but the revival of pointed architecture in this country being, as far as it extends, an attempt to imitate, as far as possible, our ecclesiastical remains, consistency and good taste require that, in buildings erected for the same purpose, respect should be had to the general principles as well as minor details.

The enriched mouldings and other ornaments in the Norman style, although extremely diversified, are, with few exceptions, such as any country mason might easily execute, as rudeness of execution is of little consequence; a bold relief and decided character being of more importance than a high degree of finish. In erecting a church in the pointed style, the cost of a tower or spire forms a very serious item in the estimate, in consequence of which it is not unfrequently omitted altogether, to the disappointment of the public, and the regret of all who comprehend the principles on which the effect of the style depends. The main lines being in a vertical direction, some prominent

feature is required in which they can be developed to some extent, or the effect of the whole is lost. In the Norman style, the vertical lines are subservient to the horizontal ones, so that no prominent part of the kind is required; a simple belfry being all that is requisite. A tower is objectionable, in buildings of this style, on another account: the Norman architects lavished all their skill, and a great portion of their expenditure, in ornamenting their west fronts, which, even where there are towers at the west end, as at Lincoln, are generally thrown into one broad *façade* without any projection, as is almost universally the case in buildings of a later date.

There are a few village churches scattered throughout the country, which have almost miraculously escaped the ruthless hand of time, and the barbarous improvements of modern churchwardens, which may serve as exemplifications of the above remarks.

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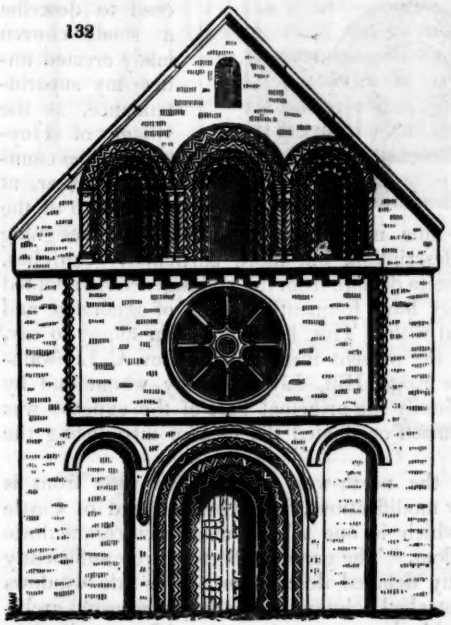

Fig. 132. is the elevation of the west front of Iffley church, Oxfordshire, restored.

Fig. 133. shows the west end of the chapel of St. Leonard's Hospital, Stamford, Lincolnshire.

These may suffice to give a general idea of the effect of the Norman fronts, though there are many others well worth attention, among which may be mentioned Stewkley, Buckinghamshire; Castle Rising, Norfolk; Adel, Yorkshire; Tickencote, Rutlandshire, and the transept of Winchester cathedral. If a tower is considered an essential requisite, perhaps one of the simplest is the short one in the centre of Iffley church, which may be seen in Britton's *Architectural Antiquities*, vol. v.; Castor Tower, the tower of Bury St. Edmunds, and the lower portion of the western towers of Lincoln cathedral, which may be found in the

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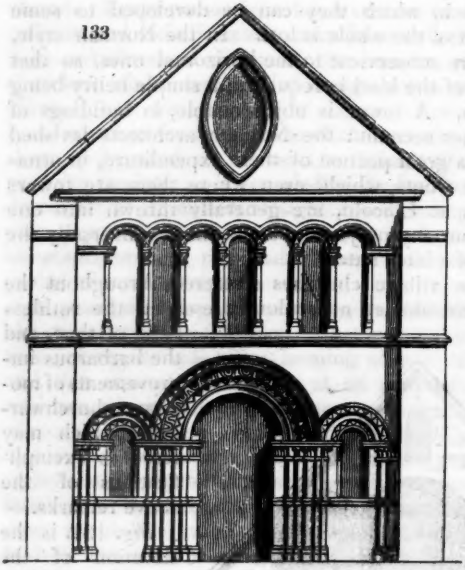

same volume, may also be consulted with advantage. For a country church, however, I am disposed to consider a belfry far more appropriate, particularly where the funds are circumscribed.

In illustration of the above remarks, I will proceed to describe a small church lately erected under my superintendence, at the village of Hoylake, in the county of Chester, at the mouth of the river Dee, about nine miles from Liverpool. In designing buildings of any description, but more particularly churches, if architects presume to deviate from the styles generally adopted and understood, they have frequently a host of ignorance and prejudice to contend with. This, however, I am happy to say, was not the case in the present instance; the Rev. C. L. Swainson, of St. Mary's Edge Hill, Liverpool, by whom and by whose benevolent family the principal part of the expense was defrayed, having himself originated the idea of introducing the Norman style.

Fig. 134. shows the north-west view. The west front is adopted, with a few modifications, from the west end of Castle Rising, Norfolk, which is one of the most picturesque little objects in the kingdom. The general effect will be sufficiently obvious without any detailed description. The side windows are finished with detached columns, and a deeply recessed archivolt above, with bold chevron or zigzag mouldings. A plain parapet crowns the side walls, supported by corbels, consisting of human and wolves' heads. The buttresses are flat, and of one width to the top, where they are finished by plain set-offs. One of the principal differences between the plans of our modern churches and those erected before the Reformation is the want of a chancel. In churches erected at the present day, a small recess for the altar, generally flanked by a vestry at each side,

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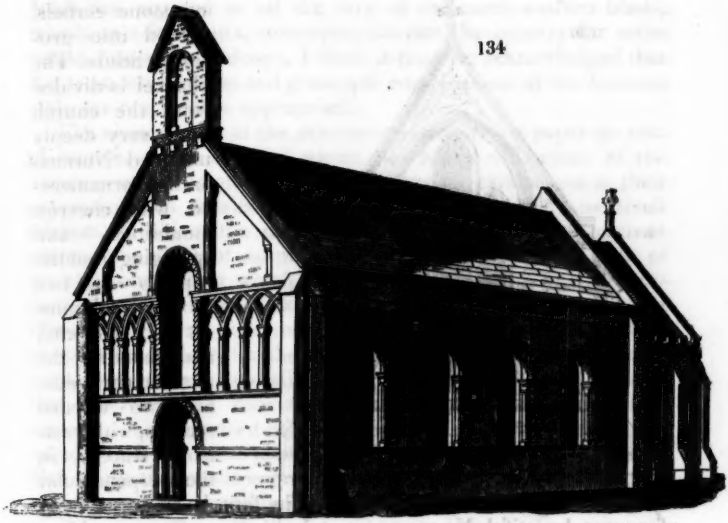

is the substitute. The chancel, in old churches, constituted a main feature of the building, even when there were no transepts; and it is frequently a source of great beauty and variety, from its having been erected at a different period from the nave or body of the church. This arrangement has been attempted in the present instance, as will be perceived from the ground plan (*fig.* 135.). The chancel is erected in the early pointed style of

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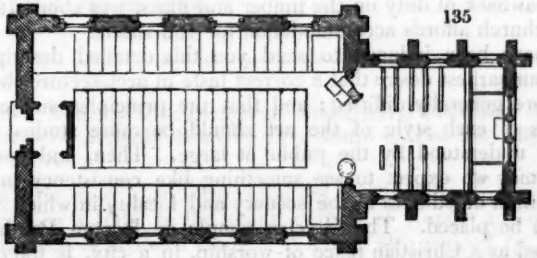

the thirteenth century, with narrow lancet windows, and bold projecting buttresses; the walls being finished with water table and embattled parapet. The east end is shown in *fig.* 136. The east window is similar to several in Salisbury Cathedral and Beverley Minster. Internally, the building is open to the frame timbers of the roof, which are moulded, and painted in imitation of dark oak; the trusses are bracketed down the walls, and rest

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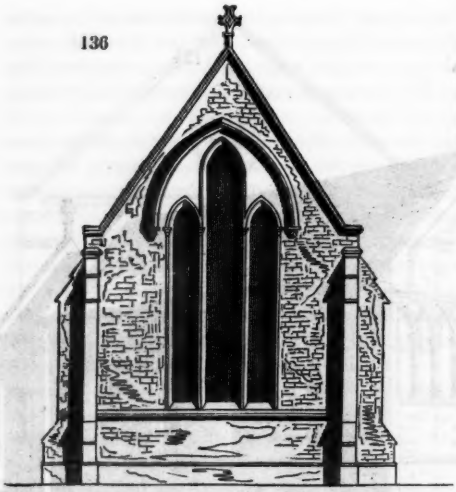

on stone corbels, carved into grotesque heads. The chancel is divided from the church by a very deeply moulded Norman arch, ornamented with chevron mouldings, and springing from the capitals of two Norman columns. At the east end, and flanking the altar on each side, are two wooden screens, with cast-iron tracery, in the perpendicular style, forming two small vestries. The font is an exact copy of a very beautiful Norman one at Lullington, Somersetshire; and the cover is constructed of antique carved oak. In the pulpits and desk, the porch and details generally, the consistency of style is scrupulously maintained. There are no enclosed pews, the whole of the seats being open benches, with the elbows at the ends raised and carved into *fleurs-de-lis*. The exterior, and most of the ornamental work in the interior, is executed in red sandstone. The whole expense, after deducting the drawback of duty on the timber and glass, was about 1900*l*. The church affords accommodation for 466 sitters.

I have been induced to send you this detailed description from an earnest desire that a correct taste in architecture should be more generally diffused; and that the principles and capabilities of each style of the art should be more studied and better understood by the public at large. Then, and not till then, may we expect to see something like consistency in the adaptation of edifices to the scenery and locality in which they are to be placed. The Grecian temple or Roman Pantheon, adopted as a Christian place of worship, in a city, is tolerably consistent and harmonious; but, when transferred to the sylvan glades and rural valleys of England, can never call forth those emotions and associations excited by the "ivy-mantled tower" or rude buttress of our own indigenous architecture. The columns on "Sunium's marbled steep" may suit the sunny skies and balmy air of the classic shores of Greece; but in the situation of the church described above, on the bleak strand of the

Irish Sea, exposed to all the fury of the north-western blasts, which, in a few hours, sometimes convert the country for miles round into a sandy desert, I think it must be acknowledged that the stern massiveness and grotesque combinations of the Norman style are much more appropriate.

The observations at the commencement of this paper do not, of course, apply in cases where the funds will admit of the varieties of the pointed style being correctly carried out in their principles and details. This, however, particularly in small edifices, is seldom the case. English architecture has revived under very different auspices, and in a very different state of society from that in which it was carried to such a pitch of perfection. The almost inexhaustible resources and command of labour and skill which were formerly lavished in the erection of splendid edifices, for the purposes of a mistaken, though, perhaps, well-meant, superstition, are now expended in diffusing the comforts and conveniences of life among all classes of society. The standard of the necessaries of subsistence is elevated; and, in consequence, the wages of labour are raised. But whilst this result is greatly to be rejoiced at, we can see no reason why taste in design and correctness of detail should be at all inconsistent with economy in expenditure. This can only be accomplished by the more general diffusion of architectural knowledge among the public who employ and judge, as well as the architects who design. To this end, such publications as the *Encyclopædia of Architecture* and the *Architectural Magazine* are eminently conducive: and that they may effect a reformation in the architectural taste of the present and future generations is indeed "a consummation devoutly to be wished."

Liverpool, June 9. 1834.

ART. IV. *Notice of some Designs for Architectural Fountains, manufactured in Artificial Stone by Mr. Austin of London.* By the CONDUCTOR.

WE have more than once remarked on the obligations which architecture is under to the manufacturers of Roman and other cements, and of artificial stone. We have also noticed (p. 159. and p. 216.) the great degree of perfection, with reference to hardness and durability, to which Mr. Austin has brought his composition. All that appears farther wanting is, to make known generally to architects, and to amateurs of architecture and garden scenery, what can be effected in this material, at a price (as may easily be conceived) extremely moderate when compared with that of real stone. We have already (p. 159.) shown

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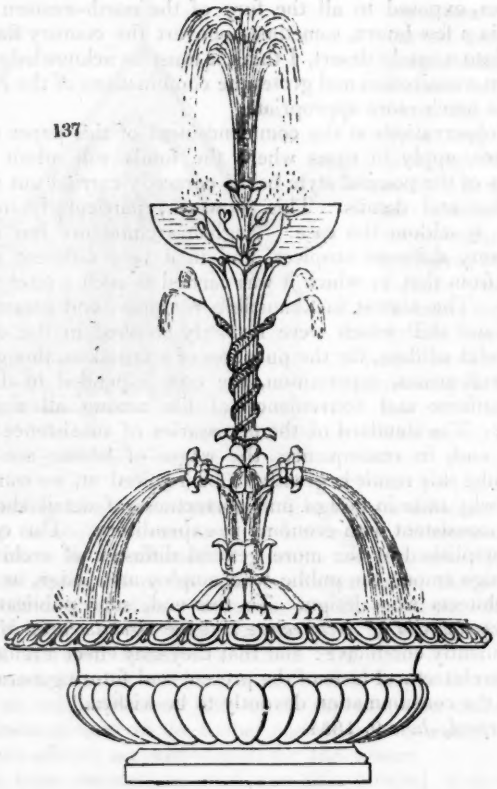

some of Mr. Austin's designs for chimney pots and shafts, and shall, at present, give figures of a few of his fountains.

Fountains, it may be observed, are ornaments particularly suitable for architectural gardens; and, as these gardens are every day becoming more common in the country, because every day the art of harmonising architecture with landscape scenery is becoming better understood, we anticipate a corresponding increase in the employment of architectural fountains. All town gardens, by which we mean chiefly those in front of street houses, may be considered as architectural; and for them such fountains are particularly suitable. The same water, which is now supplied by the water companies direct to the kitchen cisterns, might first pass through the fountain; and, from its basin, be conducted to the cistern. In the winter season, during

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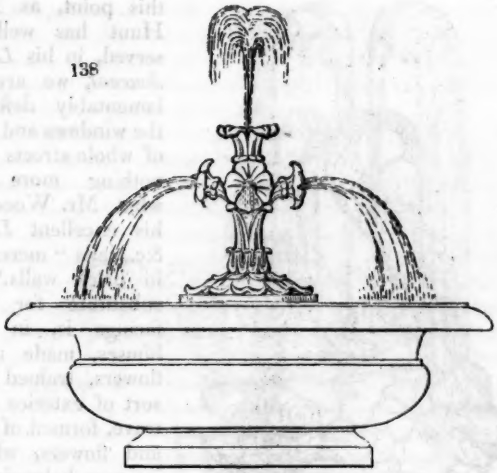

severe frost, this would be impracticable, but there could be no insurmountable objection to it, at least as far as we are aware, in the summer season. During winter, the fountains, though without water, would still be handsome as architectural ornaments; in the same manner as trees are still handsome at that season, though without leaves. All the water which enters kitchen cisterns should, in our opinion, be made to pass through a stratum of filtering materials; and this would free it from any impurities which it might receive while in the basin of the fountain.

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The improvement of street houses, in various ways, seems to be making considerable progress. Public attention has lately been roused, on this subject, by those numerous erections called gin temples: every shop front that is renewed displays a somewhat more cultivated taste than it had before; square stone chimney pots are not unfrequently introduced; and balustrades in cement or artificial stone are, in many cases, substituted for plain brick parapets. Facings or dressings to windows are also more frequent than they used to be; but on

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this point, as Leigh Hunt has well observed, in his *London Journal*, we are still lamentably deficient; the windows and doors of whole streets being nothing more than what Mr. Woods, in his excellent *Letters*, &c., calls "mere holes in brick walls." A substitute for these facings is, in some houses, made up by flowers, trained up a sort of exterior architrave, formed of wire; and flowers, whether in open balconies, covered with verandas, on common window sills, or on the upper part of the entablature of shop fronts, form delightful ornaments to the most crowded parts of the metropolis; and, happily, are every year increasing. There are scarcely three houses together, in the whole length of Oxford Street, that do not display flowers at the windows, on the house top, or in the shop. The china shop, No. 209. in Oxford Street, has a beautiful crop of grapes both outside and inside. Ivy and Virginian creepers run up considerable portions of several fronts, and the day will perhaps come when every lamp-post will have an ornamental plant of some sort climbing round it. The house the most elegantly ornamented with flowers, between Bayswater and St. Paul's, is decidedly No. 5. St. George's Terrace, Oxford Road; where the wire architraves before mentioned are introduced, and covered with luxuriant creepers; and the balconies of the windows of five stories are richly stocked with geraniums and other beautiful flowering plants. We conclude this digression by referring to what Leigh Hunt has recently said on this subject, in Nos. 21, 22, and 23. of his *London Journal*.

We do not expect by this article all at once to render fountains a popular ornament in town gardens; but if it should be the means of introducing only one or two of them in the gardens of those long rows of houses lining the New Road, the Kent Road, and other suburban roads, we shall be satisfied with the beginning. That this article, and others which have appeared, and which shall appear, in the *Gardener's Magazine*, on foun-

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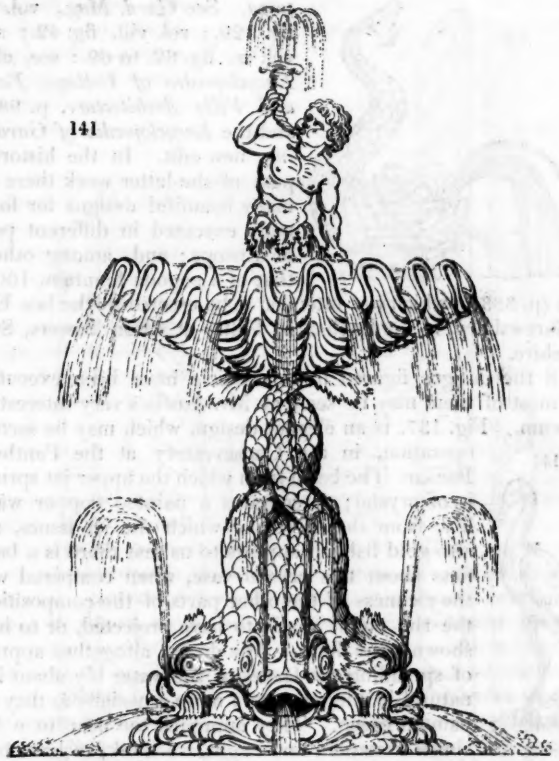

tains, vases, statues, and other architectural garden ornaments, will render them more general in villa gardens round the metropolis, and in architectural and flower-gardens in the country generally, we have not a doubt. We know, indeed, that this has already been the result, Mr. Austin having given us the names of many places to which he has supplied the stonework of fountains; and Mr. Rowley, the addresses of above a hundred noblemen and gentlemen, in different parts both of Great Britain and Ireland, to whom he has supplied the engineering apparatus for such foun-

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tains. See *Gard. Mag.*, vol. vii. fig. 129.; vol. viii. fig. 42.; and vol. ix. fig. 62. to 69.: see, also, *Encyclopædia of Cottage, Farm, and Villa Architecture*, p. 987.; and the *Encyclopædia of Gardening*, new edit. In the historical part of the latter work there are many beautiful designs for fountains executed in different parts of Europe; and, among others, that of a pagoda fountain, 100 ft. high (p. 333.), which was intended to be erected by the late Earl of Shrewsbury, in the Enchanted Valley at Alton Towers, Staffordshire.

All the designs figured in this article have been executed, and most of them may be seen, at Mr. Austin's very interesting museum. Fig. 137. is an elegant design, which may be seen in operation, in the Conservatory at the Pantheon Bazaar. The basin from which the upper jet springs is of crystal; it contains a painted copper water lily, from the flower of which the jet issues, and also gold fish. It appears to us that there is a baldness about this crystal vase, when compared with the richness of the other parts of the composition; the rim ought surely to have projected, or to have shown some lines. We do not altogether approve of spreading the leaves of the water lily about in a natural-looking manner; more especially as they are painted green. They approach too near to a facsimile imitation, and ought, we think, to have been more sculpturesque; or, in the language of our article on the principles of art, &c. (p. 281.), that the recognition of art should have been more perceptible. Fountains of this kind, terminating in elegant glass vases containing gold fish, are particularly suitable for green-houses and conservatories.

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Fig. 138. is also a conservatory fountain, composed of a portion of *fig.* 137., fixed over a basin or tazza vase, of a simple, but elegant shape. We introduce it not only to show a reason why Mr. Austin can compose a great many different kinds of fountains out of a given number of what may be called elementary parts, but to demonstrate that, several of his fountains being composed in this way, they must necessarily be less expensive than if all the separate parts of each design were modelled expressly for it.

Figs. 139, 140, and 141. are dolphin fountains, and *figs.* 142. and 143. are dolphins that can be put as supports to tazza vases,

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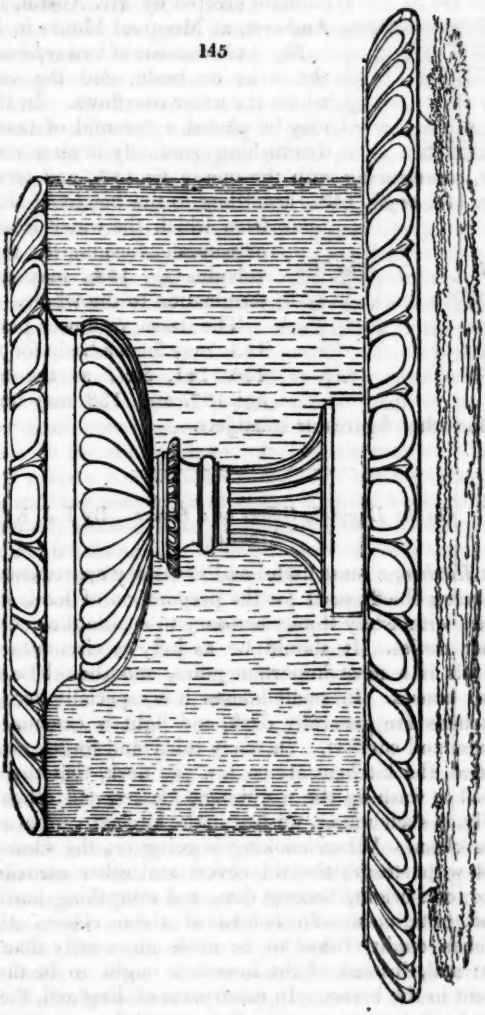

so as to form a fountain somewhat in the style of *figs.* 140. and 141. It will be observed that the same triton serves both for *fig.* 139. and *fig.* 141.; which contributes, as we have said above, both to variety and cheapness.

Fig. 144. forms one of three supports to a beautiful tazza

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fountain erected by Mr. Austin, for Lady Amherst, at Montreal House in Kent.

Fig. 145. consists of two separate parts; the tazza or basin, and the vase from which the water overflows. In this basin may be placed a pyramid of tazza vases, diminishing gradually in size, one above another, commencing with the one in *fig.* 145., and terminating with *fig.* 146. or *fig.* 147., according to the height of the source from which the water is supplied; or a nozzle, forming the water convolvulus *fig.* 148., may furnish a termination to the whole.

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The tazza or lower part of *fig.* 145. may form a basin for *figs.* 139, 140, 141, &c.; as the tazzas of *figs.* 137. and 138. may be used as basins for other figures or small jets.

ART. V. *On the Domestic Offices of a House.* By I. J. KENT, Esq., Architect.

THE Kitchen, a most useful and necessary apartment in every house, being chiefly used for the preparation of food, should be furnished with every thing necessary to enable the cook to perform her duties. It should be as lofty as circumstances will allow: this is a most important point, and should be attended to in all houses. In small houses it is especially necessary, as low kitchens are generally dark, and light is essential both to cleanliness and comfort. In many third and fourth rate houses in London, the kitchens are so low and dark, that the servants employed to wash up the tea things, glasses, and other articles, generally, in such houses, washed in the kitchen, cannot see when they are clean. When cooking is going on, the whole kitchen is filled with steam; the tin covers and other utensils, which ought to look bright, become dim, and everything has an air of dirt and untidiness. In houses of these classes, therefore, the kitchen ought always to be made more lofty than it is at present; and, instead of the lowest, it ought to be the loftiest apartment in the house. In most parts of England, the kitchen is in the basement story, or on the ground floor; but in Genoa, and many other towns in Italy, it is in the upper story of the house. This is convenient for the escape of smells, but very inconvenient in almost every other respect. Sometimes the kitchen is on the same floor with the dining-room, but detached from the house, and under a flat roof, covered with lead, or,

what is termed in London a lead flat. When this is the case, the flat should be pugged (stuffed between the roof and the ceiling with some non-conducting substance), and ventilated, so as to keep out the intense heat, which would otherwise penetrate the lead. In houses of a superior description, the kitchen should be not only lofty and light, but also well ventilated, or supplied with air flues for carrying off the steam, and the effluvia from the food. When this precaution is neglected, even in lofty kitchens, the steam hangs like a cloud below the ceiling, and the smell of the food, when cooking, is often found very unpleasant. Sometimes the escape of these effluvia to the living-rooms of the house is prevented by pugging, but this only confines them to the kitchen, while the air flues carry them away into the open air.

Where practicable, the kitchen should look to the north, or the north-east, as should all those domestic offices which require to be kept cool. When the kitchen is under ground, as is frequently the case in England, particularly in large towns, this is not of so much consequence; but it should always be as near as possible to the dining-room. In large houses it is desirable to have a private communication between the kitchen and the dining-room, by a passage (and staircase, if the kitchen, &c., are under ground) leading into an anteroom, or waiting-room for the servants, adjoining the dining-room. This passage should be thoroughly ventilated, so that any escape of effluvia from the kitchen, &c., may be dispersed before it reaches the anteroom. The anteroom should be furnished with broad shelves, fixed to the wall, with drawers beneath, to hold such articles as may be wanted by the servants waiting in the dining-room. In some houses there is a hot table, warmed by pipes of hot water, or flues, to set the dishes on, when brought from the kitchen, before they are carried into the dining-room.

A kitchen should be dry: the walls must therefore be preserved from damp, if the kitchen be under ground, by building them in cement, at least as high as the level of the floor; and, where ground is against any of the walls, it may be necessary to build an inner wall one brick thick, and hollow, against the outer wall; or to build a dry area, carried down below the level of the floor of the kitchen, which area should be ventilated and drained. The floor should be of rubbed Yorkshire stone, laid on brick walls at least two courses of bricks high above the ground. If the foundation is damp, concrete 1 ft. or 2 ft. thick, composed of clean gravel and fresh-burnt stone lime, should be thrown in first, on which the walls should be built; and air should be introduced and made to circulate freely under the stone floor, for which purpose air gratings should be fixed in all the outward walls, and openings for the air to pass through left in all the walls on which the paving is laid.

In very large kitchens, a portion of the floor opposite the fireplace, about the centre of the kitchen, and from 6 ft. to 10 ft. square, according to circumstances, should be of wood; that is, of oak joists and sleepers laid on brick walls, with a deal or oak floor. On this wooden floor the table should be placed, and by this means the cook may generally be able to avoid standing on the stone floor. The skirtings should be made with cement (not wood), wherever there are stone floors.

The ceiling of a kitchen should be always plastered; for, if this is not done, the effluvia arising from the cooking collect, and remain between the joists, in spite of all the ventilation you can provide; the spaces between the joists also afford shelter for flies, spiders, &c. As the ceilings of kitchens should be scraped, whitewashed, cleaned, and whitened (or coloured,) every year, the expense of plastering is soon repaid by the diminution of the surface; the sides of the joists making a surface of one and a half times more than the whole of the ceiling.

The doors should be all made to open towards the fireplace, otherwise the opening and shutting of them will be likely to cause the chimney to smoke.

The fireplace should be capacious in proportion to the quantity of cooking required; from 4 ft. to 8 ft. or 9 ft. wide, and never less than two bricks and a half, or 1 ft. 10½ in. deep. Large fireplaces should be 2 ft. 3 in. to 2 ft. 7½ in. deep; the range can then have a proper boiler at the back, supplied with water by a pipe from the main cistern, and regulated by a small feeding cistern, so that the boiler will always be full of water: where this plan is adopted, you will have a supply of hot, if not boiling, water at night as well as by day. A screen extending the width of the opening of the fireplaces is quite necessary, when much cooking is required, to render the kitchen complete and comfortable; this may be used as a hot closet, as well as a warmer for the plates and dishes, and it likewise saves fuel, by accelerating the roasting of the meat. In large kitchens there should be a hot plate and preserving-stoves on one side of the fireplace, and a boiler on the other; these should be covered over, at the height of 6 ft. or 7 ft., by a projection or canopy from the wall, open in front, and communicating with a flue for carrying off the steam and effluvia from the meat. There should be one or two large closets, from 3 ft. to 4 ft. wide, and at least 18 in. deep, for holding spices and other things that may be wanted by the cook.

The principal furniture required in a kitchen are, a table as large as the size of the apartment will allow, and made very strong; and a dresser, or dressers. The tops of these dressers should be 2 in. thick, and the drawers about 2 ft. wide, and 7 in. deep. The space under the drawers is sometimes enclosed with

doors, and sometimes open, having a pot board the whole width and length of the dresser, and raised 3 in. or 4 in. from the floor. There should be good locks on one or two of the drawers, and two iron or japanned handles fixed on each. A mill for coffee, one for pepper, and another for the finer spices, may be fixed to the ends of the dressers. Ranges of rails, furnished with hooks, should be fixed to the wall for the dish covers, and round towel rollers behind the doors. There should be an ash grate, and pit under the fireplace, and in large establishments a smoke jack, as it is not only the best for roasting meat, but is always ready. Where there is no smoke jack, a bottle jack is generally employed as a substitute; and this, when not in use, should be hung on a hook purposely fixed in the wall, with a small hook near it, for the key. A bottle jack should always be used with a tin stand or case, called a hastener, movable, and standing on feet, with a dripping-pan fixed in the bottom. This case is open to the fire in front, but closed at the back and sides. It should be of block tin, and should be kept very bright inside, that the rays of heat may be reflected back on the meat. Sometimes the hastener is made to serve also as a plate-warmer. When the bottle jack is not used with a hastener, or, at any rate, not fixed to it, there should be a small notched brass crow fixed to the mantelpiece for it to hang upon.

The Coal-cellar should be placed as near to the kitchen as possible, and should be sufficiently large to hold coals for nine months' consumption. There should be a ready access to it from without, for the men to shoot the coals into it.

The Scullery should be as close to the kitchen fireplace as possible. It should be paved with Yorkshire stone or brick-work, and need not be more than 9 ft. or 10 ft. high.

In every scullery there should be a stone sink as large as the space will allow, 7 in. to 8 in. thick, leaving room for a plate rack at one end. Under the plate rack, or by the side of it, should be a slanting drip-board, to convey the water that runs from the plates and dishes into the sink. A waste pipe should be fixed in the bottom of the sink, and taken into the drain, with a bell stink-trap and grating over it; or the waste pipe may be taken into a trap in the drain, and the grating soldered into the sink. Under the sink, or in some other convenient part of the floor, should be fixed a large airtight stink-trap, to carry off the water when the floor is cleaned. There should be no sink stone (a stone pierced with holes to allow the water to run off, but without any cover), as that is the most frequent means by which noisome smells escape from the drains. Hot water should be supplied to the sink by pipes taken from the cistern into the boiler at the back of the kitchen fireplace, and there coiled round several times; then conveyed to the sink, and afterwards

to the washing-troughs in the wash-house, when they are situated below the level of the cistern: cold water should be also conveyed to the sink, which may be done in pipes direct from the cistern.

The Larder, or safe, for keeping the meat and other provisions in, both before and after they are cooked, should be large, and, indeed, sufficiently capacious to contain all the provisions. It should be effectually protected from the sun's rays, and yet have a complete circulation of air all round it, if possible: it should be so placed as not to be near the dust bin or beer casks, or any other place from which dust or putrid or other bad smells can arise: it should be enclosed all round with fly-wire panels in wood framing, and should be raised above the paving, in order to admit air at bottom, and to keep it dry. The ventilation should be free at top, and be protected from rain by a double roof: it should be lofty, and should have strong iron bearers, with hooks to slide on them, so that the meat may hang above the head; and shelves, from 18 in. to 2 ft. wide round, to put dishes on. A separate safe should be provided for vegetables and fruits, and for game, if there is any quantity of it. For large safes, where it can be contrived, there should be an inner door, with a space between the doors, to enable the cook to shut the one before she opens the other. The outer or first portion of the safe may be used for those provisions that will be wanted first. For small families, one or two iron safes, hanging from some beam in the ceiling, contrived so as to be drawn up out of the way by lines and pulleys, when not in use, with one or more shelves in each, and having fly wire all round, are far better than the safes placed against brick walls, as is most usual.

The Cistern. — Over the scullery may be the cistern intended to supply the whole of the basement story with water. This, whether inside or outside of the building, should always be covered over, and have a flap in the cover to give access to the pipes. The best kind of cistern is formed of quartering framed together, with the bottom and sides boarded and lined with lead. The lead at the bottom should, in ordinary cases, be 7 lb. to 8 lb. weight to the foot, and that at the sides 5 lb. to 6 lb. to the foot; but, where the water has a tendency to corrode the lead (for instance, if at all impregnated with any kind of salt), the lead should be proportionably thicker. The pipes to supply the cistern, as well as the pipes from the cistern to serve the different sinks, &c., should be of the kind called by the lead-merchant extra-strong pipe; particularly those pipes that are laid under the ground, and those that are outside the building, and are exposed to the frost in winter. All pipes outside the building should be covered over, to protect them from injury by blows or frost. The cocks should always be of the very best manufacture, or they will be constant sources of annoyance and expense.

The Beer Cellar and the Wine Cellar.—These cellars should not have any communication with each other. Both should be arched and dry, and neither should ever be placed, if it can possibly be avoided, under the yard: if, however, such a situation be inevitable, the cellars should have solid spandrils, and be covered with two or three courses of plain tiles laid in cement. The wine cellar should be fitted up with bins, and, where large enough, divided so as to form an inner and an outer cellar; perhaps the best method of dividing the bins is by walls half a brick thick, and carried up to the top with horizontal York stone shelves every 3 ft., to divide the bins in their height. As some wines require a warmer temperature than others, the pipes that are to supply the several sinks with hot water may be carried through some of the bins, or through that portion of the cellar which is separated by a brick wall, and thus a warm cellar may be obtained at very small expense.

In large or first-rate houses, a butler's pantry, or footman's room, a housekeeper's-room, and a servants' hall are indispensable. These rooms should all have wood floors in the centre, with a course of stone paving, 2 ft. wide, all round against the walls. The floors should be laid hollow on brickwork, as described for the kitchen, and the skirting should be of cement. An air flue carried up from the hollow space under the floor, close to the chimney, would be very desirable, to keep up a constant current of air under the floors. The sinks in these rooms (of which there should be two in each, fitted up in a window recess) should be lined with lead. They should be each about 18 in. or 2 ft. long, and 12 in. or 15 in. wide, side by side, and about 12 in. deep; each should be covered with a flap, and have the space beneath it enclosed with doors, to form closets, with a shelf in each. One of the sinks should have a brass grating, about 3½ in. diameter, soldered into the bottom, with a wood drainer for decanters, &c., and the other a washer and plug with a chain. A waste pipe should be soldered into each sink, but none of these pipes must be taken into the drain without the intervention of some trap, otherwise the foul smells from the drains will be a source of annoyance. Waste pipes of this kind are sometimes allowed to empty themselves into the open area over a sink-stone trapped.

The Housekeeper's Room should have a series of closets 2 ft. deep; some with shelves for linen; others for pickles and preserves; and, again, others with drawers for stores of various kinds.

The Footman's Room, or Butler's Pantry, should have, in addition to the sinks, a large dresser fitted up with drawers and closets underneath; with a wide shelf continued all along the room, above the level of the top of the door. Adjoining this room should be a fire-proof plate closet, ventilated and kept

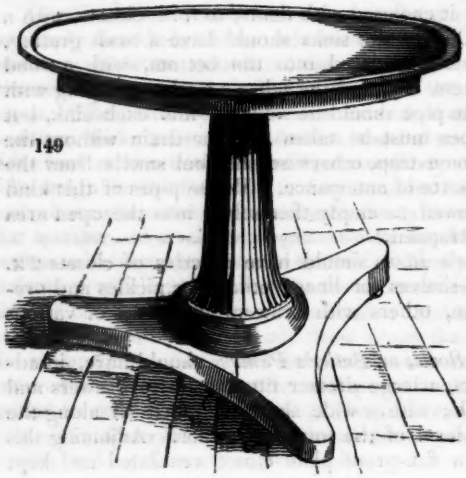
sufficiently warm to prevent it from being in the least damp. The pipes that convey the hot water to the several sinks may be made to pass round this plate closet, as well as through the wine cellar, as, when damp gains admittance, it causes double trouble to the footman, by tarnishing the plate. The plate closet should be fitted up with shelves lined with thick drugget.

The Passages should be well lighted and ventilated; otherwise the smells arising from the drains, the kitchen, &c., will be carried up into the body of the house, the air above being more rarefied than that below. The passages should be paved all over with stone or brickwork, with the skirtings of cement, and the walls plastered with stone, lime, and sand, lined out into blocks, in imitation of stones, and coloured. Plastering of this kind is much more durable than plastering composed of chalk, lime, and dirt, such as is now generally used, and is very little more expense. The bell board should be fixed in the passage between the kitchen and the servants' hall; each bell should have a pendulum attached to the spring, and the names of the rooms written on the bell board below the bells.

Manor Place, Paddington, July 25. 1834.

ART. VI. *Notice of a Marble Table, with a Cast-Iron Pillar, constructed on an economical Principle, under the Direction of John Robison, Esq.* Communicated by Mr. ROBISON.

I SEND you herewith a rude sketch (*fig.* 149.) of a marble table with a cast-iron pillar, the latter cast in a portion of the mould of our street-lamp pillars. I had it cast of the proper length, with a flat plate at the top, as shown in *fig.* 150., and by putting it in the lathe, and dressing the top plate and edge of the bottom moulding parallel to each other, I have insured the verticality of the pillar and the parallelism of the table with the floor of the rooms, which is scarcely ever seen in pillar tables with heavy tops.



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The screw-bolts, for screwing the base of the pillar to the plinth on which it stands, are shown at *a*. It makes a very handsome piece of furniture, yet is very moderate in its cost. The Pyrenean marbles are very cheap at Toulon and Bordeaux; and, as there is a constant communication between the latter place and London, by the wine ships, nothing is easier than to get slabs or tables of any dimensions from that quarter. Marble steps, slabs, flower-tables, garden seats, &c., might be cut at Bordeaux for British use, from drawings sent from England.

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Marble tops of 42 in. in diameter, and with a raised border, cost at Bordeaux, in 1832, from 75 to 85 francs; and the same size, when without a raised border, from 40 to 45 francs. The freight from Bordeaux to Edinburgh is 50*s.* per ton, and the duty 3*s.* 6*d.* per cwt.

We have lately heard of a new and most valuable caster invented for tables by the author of the above communication, who has promised us an account of it. It is very strong, will not require oiling for many years, and is not liable to go out of order.

Art. VII. *Architectural Maxims.*

Architecture is the oldest and most sublime of all the Arts; and though it must excite the feelings through the medium of thought, yet, perhaps, the feelings which it does excite are, on that account, only so much the more powerful. (*A. G. Schlegel.*)

Qualifications of a Critic.—No man can be a true critic or connoisseur, who has not a universality of mind, and who does not possess that flexibility, which, throwing aside all personal predilections and blind habits, enables him to transport himself into the peculiarities of other ages and nations, to feel them, as it were, from their proper central point; and which enables human nature to recognise and respect whatever is beautiful and grand under those external modifications which are necessary to their existence, but which sometimes even seem to disguise them. (*A. G. Schlegel, on Dramatic Literature*, vol. i. p. 3.)

To check Empiricism.—The most effectual method to check the empiricism, either of art or science, is to multiply, as far as possible, the number of those who can observe and judge. (*Alison.*)

Genius, at least what is generally so called, is the child of imitation. It is in vain to endeavour to invent without materials on which the mind may work, and in which invention must originate. Nothing can come of nothing. (*Reynolds.*)

REVIEWS.

ART. I. *Brief Memoir of Sir John Soane, R.A. F.R. and A.S., Professor of Architecture in the Royal Academy, &c.* By John Britton, F.S.A. 4to. London, 1834. (Not for sale.)

THIS memoir was prepared, by Mr. Britton, for Fisher's *National Portrait Gallery*. It is accompanied by a beautifully engraved portrait of Sir John Soane, by Thompson, after a painting by Sir Thomas Lawrence; on which Mr. Britton remarks, that "it not merely delineates the features of the countenance, but marks the air, the expression, and the apparent thinking of the living model." On the titlepage there is a beautiful group of vases from the Soanean Museum, engraved on wood by Thompson, after a drawing by Harvey; and in the last page there is an antique bas-relief, drawn on wood by the same artist, and engraved by Williams.

In Mr. Britton's introductory remarks, he states, that no architect, since the days of Vitruvius, has had his name and works known by a larger portion of the public than Sir John Soane. Sir Christopher Wren, who, like him, designed many large edifices, also lived to an old age, and was almost a martyr to litigation and splenetic criticism: but, in those days, the press was but of limited range. Now, however, the press is all-powerful; and Sir John Soane has been assailed by it because he has been fortunate and popular; and has attained wealth and honours. Every part of London can show buildings designed by Sir John Soane; and, in his work entitled *Designs for Public and Private Buildings*, folio, 1828, will be also found the plans of numerous villas and mansions, executed by him in different parts of the country. "These, however, are not the only objects that have tended to keep the name of Sir John Soane before the public for more than half a century; but, as Professor of Architecture in the Royal Academy, and as author of various pamphlets and volumes on his professional studies, and from having been an extensive and liberal benefactor to many institutions connected with the fine arts, sciences, and literature of the country, he has acquired no small portion of publicity and distinction."

"The public character of an artist," Mr. Britton observes, "is generally indicated by his professional works, which form the chief legitimate objects of commentary for the biographer. Raphael, Wren, &c., have left decided proofs of their talents;" and, of Sir John Soane, Mr. Britton adds, "it may suffice to point to the Bank of England, and say, 'That is his work;' and we will venture to assert, that, on careful examination, it will be found to manifest a fertile fancy, great abilities, and varied attributes of architectural skill. It is stamped with the broad mark of the artist's own genius, and is contradistinguished from the designs of all his predecessors and contemporaries."*

Sir John Soane was born at Reading, in Berkshire, in 1756; and, when a boy, he was placed in the office of George Dance, an architect of eminence. There young Soane "soon displayed those attributes of genius, zeal, acuteness, and perseverance which generally lead to fame." When a student in the Royal Academy, he obtained a prize medal; and was made one of its travelling students, with a small annual stipend. He left England in 1777; and, after having been some time in Italy, returned to England, with his portfolio well stocked with sketches. He was tempted to visit Greece; but resisted the

* To the interior of the Bank of England, we understand, our author's remarks will apply; but as to the exterior, with the single exception of the north-west angle, we do not know a public building so little to our taste in the metropolis. There is a want of unity of design throughout; and what can argue a greater deficiency in one of the qualities assigned by Mr. Britton to the architect, viz. fertility of fancy, than the introduction of blank windows in the boundary wall of an aggregation of buildings? — *Cond.*

temptation, because his associates were to be young Englishmen of fortune. While at Rome, he made a design for a senate-house, and one for a royal palace: views of which are in the work before alluded to. The palace was to be erected in Hyde Park, with a series of magnificent mansions extending from Knightsbridge to Bayswater. This design was much approved of by Lord Camelford; who became a warm friend and patron of the young architect when he settled in London, in about 1780. From this time to 1788, Sir John Soane was chiefly engaged in making designs for country mansions. In that year, he succeeded Sir Robert Taylor as architect to the Bank of England; and, soon after, commenced his professional operations as bank architect, by making an elaborate ground plan of the whole range of offices in their present state, with another as he proposed to arrange them. "Several houses, with a church, were to be purchased and pulled down; and the whole was to be an insulated stone edifice, constructed in the most suitable and substantial manner, without external windows; calculated for extended durability, and to resist fire." An essay on the merits of the bank, as a piece of architecture, will be found in *Illustrations of the Public Buildings of London*, 2 vols. 8vo.

Mr. Britton next notices some designs for public buildings, made by Sir John Soane, which were never executed; and others which have been only partially carried into execution. Among the latter are designs for the Board of Trade and Privy Council Offices (a model of which will be found in Mr. Day's collection, p. 138.). The new law courts at Westminster are referred to, as a test of Sir John Soane's abilities and science.

Within a limited space, Mr. Britton says: — "The architect has arranged and erected seven public courts, adapted for the accommodation of judges, counsel, lawyers, juries, witnesses, spectators, &c.; with appropriate corridors, retiring and waiting rooms, apartments for officers, &c. . . . The works were prosecuted with rapidity; and were very far advanced, when some architectural amateurs of the House of Commons found fault with the design, and obtained an order of the House to pull down a large mass of the building. Still farther, they recommended and secured the same sanction for an architectural design of their own, in what they called the Gothic style, to be built, and added to the architect's interiors, in which there is nothing Gothic." In consequence of frequent and severe remarks on these law courts in the House of Commons, and by the public press, Sir John Soane published a folio volume, in 1828, entitled *A Brief Statement of the Proceedings respecting the new Law Courts at Westminster*. This work contains all the plans, elevations, views, &c.; and," Mr. Britton says, "may be referred to as a literary, graphic, professional, and political curiosity; eminently calculated to afford useful suggestions to young architects, and even to barristers and statesmen."

"Without the aid of illustrations," Mr. Britton observes, "it would be useless to make farther comments on Sir John's designs;" and, in conclusion, he adds, "it is but justice to say, that, in making estimates, in a comprehensive knowledge of the value and quality of materials, in directing sound construction, and in the skilful arrangement of plans, Sir John Soane is allowed, by his professional brethren and rivals, to possess and exercise on all occasions a discriminating judgment." (p. 12.)

We shall conclude our notice with some account of Sir John Soane's house and museum in Lincoln's Inn Fields; which he has, with such commendable liberality, bequeathed to the public.

Sir John Soane's house, in Lincoln's Inn Fields, is distinguished by having a stone veranda, or screen, in front. The interior and the museum have constantly received additions up to the end of the year 1833; and, by act of parliament passed that year, Sir John Soane "has settled on trustees, for the benefit of future architects, and for the gratification of artists and amateurs, his inestimable museum and library. To preserve these, in their entireness, within the walls which were purposely raised for their reception and display, and in union with the numerous and original architectural forms and effects which belong to the house, the most prudent and strict clauses are introduced

into the act; and the interest of 30,000*l.*, with the rent of an adjoining house, are appropriated and granted to support and uphold the premises, and provide for a suitable domestic establishment. The whole is to be opened, for public examination, and for the study of artists, at certain times, and under due regulations; and thus a commencement is made towards supplying that desideratum, a national architectural academy. The Soanean Museum may be hailed as a novelty in this country, and probably in the world; and cannot fail of proving highly beneficial to the student in architecture, and more particularly to those persons of ardent and keenly inquisitive dispositions, who can neither afford time nor money to travel and examine the ancient edifices of distant countries. Of this truly novel and munificent donation to the public, it may be proper to give a very brief account; for it constitutes an important, a prominent feature in the biography of its proprietor and founder. A very concise catalogue of the contents of the museum and library, and a list of its pictures and drawings, would occupy a very large volume. They consist of several thousand books and MSS.; some hundreds of architectural fragments, casts, and models; numerous pieces of ancient and modern sculpture; an immense collection of architectural drawings; and several fine pictures, by Reynolds, Lawrence, Hogarth, Turner, Calcott, Howard, Jones, Canaletti; together with many objects of virtù and rarity. These are dispersed and arranged over nearly the whole of the house, from the attics to the basement floor. At the conclusion of the professor's twelfth lecture, at the Royal Academy, March 21. 1833, Sir John, speaking of his house and its contents, said:—'This collection, which is now my absolute property, I hold henceforth as a trustee for the country; and, when I can no longer give my personal care to its protection and enlargement, that duty will devolve on others; who will exercise this trust under such regulations as will insure the perpetuation of those national advantages, to the promotion of which I have dedicated a large portion of an active and anxious life.'" *

If envy be ever allowable, that man may well be envied who has been the architect of such a fortune, who has maintained through a long life such an unspotted reputation for probity and honour, and who, in the prospect of terminating his career, can leave behind him such a monument.

ART. II. *Observations on Building and Brickmaking: to which are subjoined Extracts from Testimonials in behalf of S. R. Bakewell's Brickmaking Machines.* By S. R. Bakewell. Pamph. 8vo. Manchester, 1834.

THERE is an account of this tract given at some length in the *Mechanics' Magazine*, No. 578., for Sept. 6. 1834, to which we refer our readers; observing only, that the intelligent editor of that work considers Mr. Bakewell as having made important improvements in the art of brickmaking: which improvements, he thinks, will ere long be universally adopted. One of these consists in a more rapid and perfect manner of mixing and tempering the clay; and another, in employing a machine to press the clay, when in a half-dry state, into the mould before burning. The machine for pressing is very simple, and easily worked; though it is capable of communicating a pressure to the bricks, when in a half-dried state, of more than two tons. The bricks, when pressed, fired, and ready for the builder, have the upper and under face of each, and also the two ends, indented or countersunk, about a quarter of an inch deep, and within an inch of their edges. This enables the bricklayer to make much smaller joints than he can with bricks as they are at present formed; while the mortar which fills the cavities forms a sort of

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* A ground plan, with views of the different apartments, and of several architectural and sculptured objects, with a descriptive account of the house, are published in a quarto volume, entitled *The Union of Architecture, Sculpture, and Painting*, by John Britton, F.S.A.

dowel to hold the walls together. In short, it is clear to us that both the beauty and durability of these bricks, and of the walls in which they are used, must far exceed anything hitherto to be met with in this country; and we can only hope that Mr. Bakewell's improvements will speedily come into use in the neighbourhood of London. Walls properly built of good sound bricks of the common manufacture, and with good stone lime and Thames sand, we consider as far stronger than any description of stone walls, except those formed of large blocks; but those formed of bricks manufactured in Mr. Bakewell's manner will be both more handsome and more durable than any brick walls heretofore erected. The great strength of brick walls is the result of their homogeneousness, supposing, of course, that they are properly built with the best mortar; and their durability depends jointly on their homogeneousness, and on the thorough vitrification of the bricks of which they are composed.

ART. III. *Catalogue of Works on Architecture, Building, and Furnishing, and on the Arts more immediately connected therewith, recently published.*

BILLINGTON's Architectural Director, &c. Parts 6. and 7. 2*s.* 6*d.* each.

Part 6. contains a transverse section of a church at Genoa; ornaments of mouldings; a door in Rome; plan and elevations of a house in Rome; impost and architraves of the five orders, and a Doric door. The letterpress consists of a comparative table of the general proportions of the Ionic Order. The descriptions of the orders, &c., go as far as p. 224., and there are eight pages of the lexicon.

Part 7. contains three plans of houses in Rome; two plates of ornament; a plate of the Composite Order; one of the crowning entablature, and another of details of the same order. The letterpress includes a table of the Corinthian Order of Vignola; the directions, &c., for drawing the orders go as far as p. 264.; and there are eight pages of lexicon. In the latter, the second term which occurs is "Clear-story windows;" and we have, as an explanation, "windows which are without transoms:" whereas the words "clear-story windows," as every Gothic architect knows, mean simply over-story windows; being applied to the windows in the upper stage or story of the naves of churches, which are over, and clear and detached from, the ailes. This part of the work, as we said before, is singularly imperfect.

Locke, Johnson, and Copland's Ornamental Designs. 4to, 25 plates. London, 1834. 9*s.* 6*d.*

These designs are intended for the ornamental painter, carver and gilder, and printed paper and printed cotton manufacturer. They also include shields, compartments, masks, &c. They were originally published more than half a century ago; and this work is a reprint, with a view to supply the present demand for the grotesque fanciful ornaments commonly said to be in the style of Louis XIV. A good deal of fancy is certainly displayed in these ornaments; but it is fancy of the most inferior kind of art, a fancy which is chiefly exercised in combining into a whole lines and forms which have little or no meaning of themselves. Were lines and forms representing natural objects (such as trees, flowers, animals, insects; or artificial objects, such as buildings, statues, sculpture, furniture, &c.,) so combined, there would then be a higher degree of fancy displayed; more mind, at all events; and, according to the taste and talent of the artist, some degree of sentiment of love, or admiration; or of the elegant, the romantic, the rural, or the classical, instead of the mere picturesque, or more frequently the grotesque. This last term is very properly applied to subjects like those before us; since, as far as they do imitate natural forms, they are chiefly shells, or such fragments of shells or other marine productions, as are used in grottoes. This book is abundantly cheap, which is the best thing we can say of it.

Art. IV. *Literary Notices.*

Elementary and Practical Instructions on the Art of building Cottages and Houses for the humbler Classes. — An easy method of constructing earthen walls, adapted to the erection of dwelling-houses, agricultural and other buildings, surpassing those built of timber in comfort and stability, and equalling those built of brick; at the same time effecting a considerable saving in the expense, as it may be performed by any person without previous experience, and in any climate: to which is added, a practical treatise on the manufacture of bricks and lime, and on the arts of digging wells, and draining, rearing and managing a vegetable garden; of the management of pigs, poultry, sheep, and other cattle; making of bacon, hams, &c., for winter stock. The whole applied for the use of emigrants, to the better lodging of the peasantry of Ireland, and to those districts to which the benevolence of landed proprietors is now directed. With six plates of plans and elevations, and several woodcuts of details. Lond. 8vo.

Eight Views of Fountain Abbey, intended to illustrate the architectural and picturesque scenery of that celebrated ruin; etched on copperplate from original drawings by J. Metcalf and J. W. Carmichael; with a historical and architectural description, by T. Sopwith, author of various works on architecture, the surveying of mines, and land-surveying. Lond.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Verandas and Windows.— There are some excellent remarks on the subjects of these parts of a house in *Leigh Hunt's London Journal*, No. 31. for August 1834. This Journal, which is published weekly at three halfpence, is, in our opinion, the most delightful of all the cheap periodicals of the present day. It treats of the same subjects as the *Spectator* of old, and is, in our times, what the *Spectator* and the *Tatler* were in the reigns of William III. and Anne. If there are any of our readers who do not take it in, we recommend them, at all events, to purchase numbers 21, 22, and 23., for the sake of the architectural remarks which they contain. Verandas, Leigh Hunt observes, hide shabby windows, and form a balcony for flowers. Windows down to the floor admit light from below, instead of from above, and let in draughts of air across the floor so as to chill the feet. The outsides of windows in this country are almost universally eyesores. "Look at the windows down the streets at the west end of the town, and they are almost all mere slits in the walls, just such as they make for barracks and workhouses. The windows of an Irish cabin are as good, as far as architecture is concerned. The portholes of a man-of-war have as much merit. There is no pediment, no border; seldom even one visible variety of any sort, not a coloured brick." (p. 161.) Boxes of flowers placed on the outsides of windows, Mr. Hunt thinks, give a liberal look to the house, and, he adds, "keep up a good-natured kind of intercourse between the inmates of a house and those who pass it." Imagine, he says, whole streets adorned with flowers, and multitudes proceeding on their tasks through avenues of lilies and geraniums. A few seeds, and a little trouble, "would clothe our houses every summer, as high as we chose, with draperies of green and scarlet." Ivy wards off the rain, and keeps walls dry. So much for the outsides of windows. Mr. Hunt next considers windows from the inside. A window is a frame for other pictures besides its own, and it may be made, by curtains and blinds, either to harmonise with what is without, as well as with what is within; or to improve or conceal, as may be found desirable, the objects looked to. The inmates might see through roses and geraniums, or through a painted blind; or through one part of the window which looked on a pleasing object, while the other part might be shaded by a curtain

or a blind, or a plant, to prevent the eye from seeing what were better concealed. "Shutters should always be divided in two, horizontally, as well as otherwise, for purposes of this kind. It is sometimes pleasant to close the lower portion, if only to preserve a greater sense of quiet and seclusion, and to read and write the more to yourself; light from above having both a softer and stronger effect, than when admitted from all quarters. We have seen shutters, by judicious management in this way, in the house of a poor man who had a taste for nature, contribute to the comfort and even elegance of a room in a surprising manner, and (by the opening of the lower portions, and the closure of the upper) at once to shut out all the sun that was not wanted, and to convert a row of stunted trees into an appearance of interminable foliage, as thick as if it had been in a forest." (p. 170.) A window "put high up in a building," and commanding a distant prospect, gives a sense of power and superiority to earth, and is in fact sublime; hence the grandeur and beauty of those clusters of round-arched windows in the upper parts of Italian villas, in campaniles, and in the bell and prospect towers of this country. High rooms are always healthier than those on the ground floor, and the healthiest quarters of towns are almost always the highest. For that reason the time may come when sitting-rooms will occupy the place of garrets. We again recommend the articles from which these remarks are extracted to every reader.

Art. II. *Foreign Notices.*

INDIA.

Cement, in India (p. 272.), is not only mixed up with a coarse sort of melasses, but finely powdered brickdust is frequently put in it. Might not those ingredients add to the hardness and durability of British cements, and even of Austin's artificial stone? The chunam of India, after two or three years, becomes so hard that it can hardly be broken, and the flat or terrace roofs made of it last for generations without cracking, or admitting a drop of water, notwithstanding the continued heavy rains to which they are exposed at certain seasons.—*G. P. Brixton, August* 21. 1834.

CHINA.

The Architecture of China, as far as we can gather from *Gutzlaff's Journal of a Voyage along the Coast of China, in* 1831, 1832, *and* 1833, appears to be a variation of that of the Hindús, as described by Rám Ráz (p. 257.), but, as there are few splendid buildings, in consequence, chiefly, of there being no established religion, or wealthy church hierarchy, the style is in very few places fully developed. The forms and proportions of the columns are the same as those in Hindú architecture, and also the curved lines of the roofs. In the smaller buildings there appear to be ornaments not to be found in the work of Rám Ráz; but there is nothing sufficiently different, in the component parts of this mode of building, to constitute a different style, which must always depend on main features, and not on ornaments. The houses of the common people in China are of mud, and consist but of one apartment; those of the better circumstanced are of brick. It appears from Gutzlaff's book, and also from a notice of it in the *Westminster Review*, No. 41., for July, 1834, that the idea generally entertained of the Chinese being averse to the introduction of strangers into their country, is a delusion propagated by the East India Company in support of their monopoly. That monopoly being now in a great measure destroyed, we may soon expect to have travels in the interior of China by European artists, architects, and cultivators, who will convey to us more correct notions of Chinese architecture, sculpture, costume, landscape scenery, gardening, and agriculture, than we have yet obtained.

In building in Canton, and other Parts of China, immense quantities of pepper,

and pepper dust are employed; so much so, that the greater part of the pepper raised in the Island of Penang is sent to the Canton market, where it generally bears a higher price than it does in London. The pepper dust is mixed with the plaster used for the last coat of the insides of rooms, in order to diffuse an agreeable odour, such rooms not being painted. The whole pepper is mixed with the mortar used in the walls; because it is found to stop the ravages of the white ant, one of the most destructive insects in tropical climates.—*G. P. Brixton, August* 21. 1834.

Art. III. *Domestic Notices.*

ENGLAND.

A handsome Entrance to St. James's Park, from the north end of Duke Street, which has been recently laid open by the removal of several old houses, is about to be formed by the Commissioners of Woods, Forests, &c. The proposed communication consists of two flights of steps with landings between, and parapets on each side, and enclosed at each end by very handsome iron gates between stone piers. It will run parallel with the east flank of the new State Paper Office, and will materially improve Duke Street. It has been designed by Messrs. Chawner and Rhodes, the crown surveyors, and is to be erected under their superintendence.—*Amicus. August* 7. 1834.

A writer in the *Times* suggests the idea of pulling down St. James's Palace, and making a grand entrance to St. James's Park on its site. We should prefer the continuation of Pall Mall in a direct line to the park, and having a proper entrance formed there, together with the execution of the other improvements in St. James's Park, the Green Park, and Hyde Park, suggested by Mr. Thompson, in the first volume of the *Gardener's Magazine* (p. 281.). One of the greatest beauties in this plan is, that it would bring Kensington Gardens to Pall Mall; where, by the gateway proposed, persons on foot might enter, and, passing through a tunnel under the road at Hyde Park Corner, proceed, unmolested by horses or carriages, to the farthest extremity of the gardens. Were the bridge across the Serpentine River yet to build, Mr. Thompson's paper might have had the effect of preventing such an absurdity from being committed; but, in 1826, when it was published, the bridge was already commenced; and, besides, at that time, government was not much in the habit of attending to the suggestions of the press. By our postscript to Mr. Thompson's paper, however, and by letters in the *Times*, we had the satisfaction to get the pieces of water brought to one level, and to prevent the absurdity of a bridge of five arches being built over a dry bank; which bank, in the plans at the office of the Commissioners of Woods and Forests, was represented as a waterfall.

Cambridgeshire.—Fitzwilliam Museum. The syndicate appointed by the University of Cambridge to receive plans and estimates for the rebuilding of the Fitzwilliam Museum have extended the time for receiving such plans, from the 12th of November next, to the 10th of April, 1835. (*Times*, August, 1834.) If we were to refer to the parties in London where particulars are to be obtained by architects intending to compete, we should subject ourselves to the advertising duty; but, as this is expected to be taken off next year, we shall then be able to render more service to the profession by notices of this kind than we can now do. Till this takes place, we may observe, that the architectural booksellers of the metropolis are at present the most likely persons to give information to architects on such subjects.

SCOTLAND.

Leith Harbour has lately been surveyed by Mr. Cubitt, an eminent London engineer sent down by government. The object is to ascertain how far it is practicable to construct a low-water pier and wet docks, which would evidently greatly facilitate the entrance and exit of vessels. The present high-water harbour was constructed some years before the Union; and, though it

has since undergone repairs at different periods, it has never been rendered properly efficient.

The Commissioners for improving the City of Edinburgh were recommended to consult Mr. Cubitt the engineer, respecting some points in their improvements on which there existed a difference of opinion; but, strange as it may seem, these commissioners could not even agree as to the propriety of asking Mr. Cubitt's advice. Judging from the Edinburgh newspapers, the commission does not appear to work well.

IRELAND.

On the Dublin and Kingston Railroad there seem to have been some terrible blunders made by the engineers. Four or five of the land arches have tumbled down, and more are expected to follow. — *S. T. Kingston, July*, 1831.

An Analysis, chemical and mechanical, of all the principal Bricks made in Britain is about to be undertaken by our correspondent, Mr. Mallet of Dublin. For this purpose, he would be glad to receive specimens (average samples) of all the different kinds of bricks made in England, Scotland, and Ireland. Each specimen should be a whole brick, taken from near the centre of the kiln. It should be carefully labelled with the name of the maker and the brickfield, the general character of the brick, and whether the clay was ground in a mill or merely mixed, and how long it was exposed. Each brick should be wrapped up in paper; and all those brickmakers who are nearer London than Dublin, may send their bricks, carriage paid, to the care of the Conductor of the Architectural Magazine, at Messrs. Longman, Rees, and Co., Paternoster Row. Mr. Mallet observes, that his object is to deduce the best possible proportions of alumina, silica, iron, and, perhaps, lime, that will produce the best bricks for general purposes. This, he says, has been attempted on a small scale, but never properly executed, to his knowledge. It is a vast labour, and a most important one. Those of our readers who take an interest in this subject will, we trust, use every means in their power to second the efforts of Mr. Mallet, by sending him specimens either to his residence, 94. Capel Street, Dublin, or to our care, agreeably to the directions given above. The result of Mr. Mallet's analysis, taken in connection with the mechanical improvements of Mr. Bakewell, noticed p. 312., promises a great change in brick buildings. At present, when society is in what may be called a transition state, this is, perhaps, of less consequence than may appear at first sight, because the fashions in house and shop building change much oftener than the decay of the structure; but when all are more equally enlightened, and, consequently, more nearly alike in wealth, it will be found desirable to have buildings of greater durability, as well as of greater beauty. Instead of one mansion and a hundred miserable mud cottages, we shall have ten villas and eighty comfortable cottage dwellings of brick.

ART. IV. *Retrospective Criticism.*

THE Porticoes of the London University and the new National Gallery. — It affords me great satisfaction to find that, in his excellent paper on Grecian architecture, your very able contributor, Mr. Trotman, has borne his testimony to the merits of the portico of the London University, respecting which many newspaper writers have had the hardihood or the ignorance to assert that no one, save Mr. Wilkins himself, ever saw anything to admire in it, although its beauty was never disputed until the architect had given offence by his strictures on that of St. Martin's church. Not only had it escaped the censure since attempted to be levelled against it, but it had actually been spoken of in terms of unqualified admiration, and that, too, by some of the parties who have since laboured with might and main to bring that and Mr. Wilkins into discredit; thereby proving their praise to be as timeserving and valueless as their malevolence is base and contemptible. In the introduction to the second volume

of the *Public Buildings of London*, Mr. Britton passes a brief, yet sufficiently liberal, encomium upon the University and its portico; while both Mr. Hosking and Mr. Wightwick, the latter more especially, speak of it in the language of genuine admiration. To the suffrages of the two last-mentioned gentlemen, both of whom are professional architects, and consequently not liable to the suspicion of having any private interest to serve in extolling the work of a living brother in their art, to their suffrage may now be added that of Mr. Trotman. What renders their testimony the more important is, that, while the others published their opinions of the building in question previously to the attack of the newspapers upon Mr. Wilkins, the fourth has delivered his perfectly uninfluenced by the sneers directed against the architect and his building. Hardly is it to be supposed that such writers would voluntarily commit themselves, by thus warmly commending what they did not believe to possess real merit. So far, therefore, is the assertion above alluded to from being true, that the portico of the University has, perhaps, obtained stronger and more unequivocal approbation than almost any other contemporary structure. So very far, too, is mere abuse from being calculated to set aside, that it rather tends to corroborate, what has been said in its praise; because, if those who are evidently anxious to bring that piece of architecture into discredit assign no reasons, nor enter into any criticism, it may be concluded either that they are so ignorant of the art as not to be able to make any remarks, or that they cannot discern any fault in it. It is true that one individual (Mr. Gwilt) has affirmed that the columns look like a row of Dutch skittles or nine-pins, and so, perhaps, they may in his eyes; yet that is no fault of the architect, rather of the order itself, and of both Grecian and Roman architecture altogether. The columns themselves are unobjectionable; the disposition of them far more imposing, and more classical withal, than in any other examples in this country; the result most happy, in a due admixture of richness and simplicity, of picturesque and architectural effect; consequently, if it is still far from satisfying Mr. G.'s fastidious taste, it must be this system itself which is defective. Or it is possible that he conceives the principles of ancient architecture to have been greatly amended and perfected by the Italian school; and that the latter, rather than the former, ought to be our guides. Much is it to be regretted that he did not take the trouble to explain himself, and to point out what it is which, in his opinion, causes the columns of the London University, in particular, to bear so fatal a resemblance to nine-pins. He might very properly, too, have animadverted, at the same time, on the exceedingly bad taste of those who have lavished their admiration upon so contemptible a piece of design; which, by the by, would have answered the purpose quite as well as denying that it has obtained any admiration at all.

Whether it was altogether becoming in Mr. Wilkins himself to refer to his own portico as an illustration of the superiority of Greek principles, I conceive to be a point of very minor importance, and as not at all affecting the building itself, although advantage has been taken of it to reproach Mr. Wilkins for his offensive vanity. It is amusing, however, to observe how very tenderly an equal or even greater degree of the same failing is treated by those who affected to be disgusted with it in so self-sufficient a person as Mr. Wilkins. Not many weeks ago, in reviewing Sir John Soane's *Professional Life*, the *Literary Gazette* quoted a very remarkable passage, rendered still more noticeable by its being printed in capitals, wherein Sir John speaks of his designs for the new law courts at Westminster in a tone of the highest satisfaction. Nevertheless this effusion of self-commendation called forth not even the slightest reproof. This and a variety of other circumstances tend to show that the allegations brought against Mr. Wilkins were dictated by a determination to censure; and that criticism has been grievously warped and perverted to an ungenerous purpose. Let works of art be appreciated according to their actual merits or defects, and not cried up or disparaged on totally extrinsic grounds. For my own part, I should admire the London University quite as much as I now do, had it been erected by any one else; neither do I consider that I am thereby pledged to an equal approval of the building lately

commenced in Trafalgar Square. In fact, after seeing the model of it in Mr. Day's exhibition, I begin to entertain some misgivings on the subject. All the effect arising from columns is confined to the centre and the two pavilions, in which is placed the entrance leading to Castle Street, &c.; and as in these latter the centre intercolumns are necessarily very much greater than suits the other proportions, perhaps it would have been more judicious to have omitted columns here altogether, and applied them elsewhere (in the parts immediately adjoining the portico, for instance), whereby greater importance would have been given to that division, and it would have been rendered both more varied and more continuous. According to the model, the two intercolumns on each side of the portico look bare and unfinished, all the upper story being merely blank wall between the antæ, instead of there being more enrichment than in the corresponding spaces elsewhere. So far, this is anything but an improvement on the first design, where there were niches above, and a plain unbroken surface below, whereby breadth and repose, together with the appearance of solidity, were given where propriety called for them. In the altered model, again, although the centre dome is more elevated, its design by no means accords so well with the general character of Grecian architecture as the first one. Another circumstance which, although not easily avoidable, operates very disadvantageously to the whole, is, that the lower part of the structure is perforated with windows, while the upper is solid.

In making these observations, I am well aware that Mr. Wilkins must have had no ordinary difficulties to contend with, owing to limited space (limited, I mean, as to depth), and to being restricted, in the height of his order, by making use of the columns which belonged to the portico of Carlton House. It is not improbable, however, that the model may yet undergo many corrections; and I, for one, sincerely hope he will reconsider some of the things I have thus taken the liberty of pointing out. — *Candidus. London, March*, 1834.

Doweled Floors (p. 168.) — In my last paper on the choice of a house, some mistake has arisen respecting the explanation of doweled floors, which I shall feel obliged by your correcting by the insertion of the following lines. Doweled floors *are* nailed to the joists; but in such a manner as for the nails not to be seen. The first board that is laid is nailed on one edge, by the nails being driven straight through the board, the heads of the nails being afterwards concealed by the skirting; and, on the other edge, by nails driven in slanting, through about half the thickness of the board to the joist below. Dowels or pins, either of iron or wood, are previously let into the board at given distances, one end of each projecting, in order that it may be fitted into a hole made in the thickness of the next board, which is not to be nailed on the edge where it is joined to the first board. The whole floor is laid in this manner, each board being nailed only on one edge, and that through half its thickness, except the first board and the last; both of which are nailed on both edges, the nails which would otherwise be seen on the outside being hidden by the skirting. The dowels are for keeping the boards firm on the side on which they are not nailed.

The best floors are framed, parquetted, or inlaid with different kinds of wood; but doweled floors, even of deal, are far superior to either folding or straight-jointed floors, which are those in most general use. Folding floors (see *Encyc. of Cott. Arch.*, fig. 62.) are made of boards of different widths, and the joining of them in length forms an awkward mark or seam. The straight-jointed floors are made of boards of the same width, but are joined at irregular distances. The folding floors have each board nailed on both edges on the surface of the board; but the straight-jointed floors are nailed on the edge on one side like the doweled floors, and on the surface of the board only on the other side, as a substitute for the dowels or wooden pins which hold the boards together in doweled floors, as without some support the boards would not be firm. The straight-jointed floor is much superior to the common folding floor, and it is generally used for the principal rooms in third and fourth rate houses. —*I. J. Kent. Manor Place, Paddington, July* 28. 1834.

Art. V. *Queries and Answers.*

The best general Work on Architecture for a Beginner. — The title, price, and publisher of such a work is wanted by — *T. W. Barnes. Newcastle under Line, July* 25. 1834.

Concrete. — Have the walls of any house been formed entirely of concrete? Would not this, in many parts of the country, be a cheaper mode of building than either brickwork or rough stone? There can be no doubt of its durability, provided the work were executed properly. A system of frames and moulds could be put up so as to admit of laying on the concrete in layers, in the same manner as in building in *pisé*. At all events, fence and garden walls might be built in this manner. Would it not, also, be a good material to substitute for macadamised stones, or common pavements in the streets of towns; provided the layers were made sufficiently thick, and had proper time allowed to dry and harden before they were travelled over. — *J. B. The Rectory, near Lymington, Aug.*, 1834.

Method of righting a Tower. — Can any of your readers give me some account of the method used in righting the tower of a large pin manufactory in the London Road, Southwark? I have heard that it was a very novel, ingenious, and successful experiment; and executed (I believe) by Mr. Smith, builder, of Woolwich. — *Amicus. London, Aug.* 7. 1834.

Art. VI. *Obituary.*

Died, on Sept. 2., at his house in Abingdon Street, London, in his seventy-ninth year, *Thomas Telford*, Esq. F.R.S. &c., and President of the Institution of Civil Engineers. This eminent engineer and most excellent man "was a native of Langholm, in Dumfriesshire, which he left at an early age. His gradual rise, from the stonemason and builder's yards, to the top of his profession in his own country, is to be ascribed not more to his genius, his consummate ability, and persevering industry, than to his plain, honest, straightforward dealing, and the integrity and candour which marked his character throughout life. Mr. Telford had been for some time past, by degrees, retiring from his professional business; and, of late, chiefly employed his time in writing a detailed account of the principal works he planned, and lived to see executed; which account he had only finished a few days before his death. There is hardly a county in England, Wales, or Scotland in which his works may not be pointed out. The Menai and Conway bridges, the Caledonian Canal, the St. Katharine's Docks, the Holyhead roads and bridges, the Highland roads and bridges, the Chirke and Pont-y-Cyssyllte aqueducts, and the canals in Salop, and other great works in that county, of which he was surveyor for more than half a century, will immortalise the name of Telford." (*Morning Chronicle*, Sept. 5. 1834.) "Mr. Telford was also a poet, and wrote in the *Scots Magazine* under the signature of 'Eskdale Tam;' and in Currie's *Life of Burns* will be found some beautiful verses, by Mr. Telford, to the memory of that poet." (*Mech. Mag.*, No. 578.) Mr. Telford is the author of the articles "Architecture, Bridge," &c., in Brewster's *Encyclopædia;* and he has the merit of being the first practical man to point out, in the former article, the philosophical principles of architecture, as contained in Alison's *Essays on Taste*. It was about the time this article was published (1815 or 1816) that we first became acquainted with Mr. Telford; and we can add our testimony to that of all who knew him (we may safely say, without exception), of his high moral worth and affable manners. His life and works will no doubt be published.